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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,353	07/17/2003	Naoyuki Kurihara	P23984	8918
7055	7590	12/29/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			NGUYEN, SIMON	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/620,353	<b>Applicant(s)</b> KURIHARA, NAOYUKI	
	<b>Examiner</b> SIMON D. NGUYEN	<b>Art Unit</b> 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (2002/0054625 A1) in view of Imaizumi et al. (6,707,844).

Regarding claim 1, Matsumoto discloses a delay profile for a multi-path signal CDMA receiver (abstract, figs.7,9), comprising: buffering received signals in a storage memory (500, 502,503,505 of fig.7); performing a correlation detection (abstract); performing in-phase addition using the obtained correlation +1, -1 (in-phase addition fig.10 (prior art), paragraphs 99, 200); and performing a power calculation of the received signal and making a delay profile (601 of fig.7), wherein the received signals are stored according to the path (fig.7). However, Matsumoto does not specifically disclose the received data corresponding to a first path is stored in a first bank the received data corresponding to a second path is stored in a second bank.

Imaizumi, in the same field of invention, discloses a received data corresponding to a first path is stored in a first bank and the received data corresponding to a second path is stored in a second bank (fig. 7, column 16 line 9 to column 17 line 21, column 18 lines 10, 58-67). Therefore, it would have been obvious to one skilled in the art at the

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time the invention was made to have Matsumoto, modified by Imaizumi in order to reduce the time required for calculating the correlation.

Regarding claim 4, this claim is rejected for the same reason as set forth in claim 1.

Regarding claims 3 and 6-7, Matsumoto discloses the symbol pattern +1, -1 is from a pilot signal (paragraph 99, fig.10) in a CDMA system (paragraph 53). Imaizumi discloses the system is a W-CDMA (column 1 line 27).

Regarding claims 2 and 5, Matsumoto discloses the relationship between the first path memory and second path memory based on information acquired regarding the timing of the received signal (paragraphs 67, 68, 106, 108, 141, 165, 201). Imaizumi discloses the relationship between the first path memory and second path memory based on information acquired regarding the timing of the received signal (column 7 lines 28-63). However, both do not specifically disclose a memory capacity configuring to smaller than a capacity of data corresponding to a search period.

It should be noted that since Matsumoto disclose the in-phase addition add +1, -1 symbol to generate the delay profile, which means the delay profile does not need to accumulate. Therefore, the memory capacity is smaller than a capacity of data in a search period.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-

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7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

600 Dulany, Alexandria, VA 22314

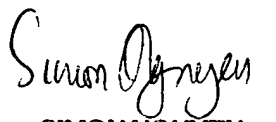
Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Hand-delivered response should be brought to Customer Service Window located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Simon Nguyen

December 14, 2005

  
SIMON NGUYEN  
PRIMARY EXAMINER